



Bureau of Engraving and Printing Production Facility
Beltsville, Maryland

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Project Description

The new manufacturing facility for the Bureau of Engraving and Printing (BEP) will mark a new era in the history of U.S. currency production. Nestled in the landscape of the Beltsville Agricultural Research Center in Maryland, the 1.2-million-square-foot building will serve as the BEP production facility in the National Capital Region. It will transform day-to-day life at the BEP, streamline the printing process, and significantly reduce the bureau's carbon footprint for the next century.

The design approach is one of balance: to create a human-centered space while promoting automation and technology; to honor the BEP's past while embracing its future; and to merge architecture and landscape in a complementary way. The result is a holistic vision where BEP's diverse departments come together to increase efficiency and reduce whole life carbon impact, all while creating the next generation of the world's leading currency.

Sustainable integration of landscape and architecture

5 Acres

Reforested Area

21 Acres

Building Area

22 Acres

Newly Added Tree Canopy

104 Acres

Site Area



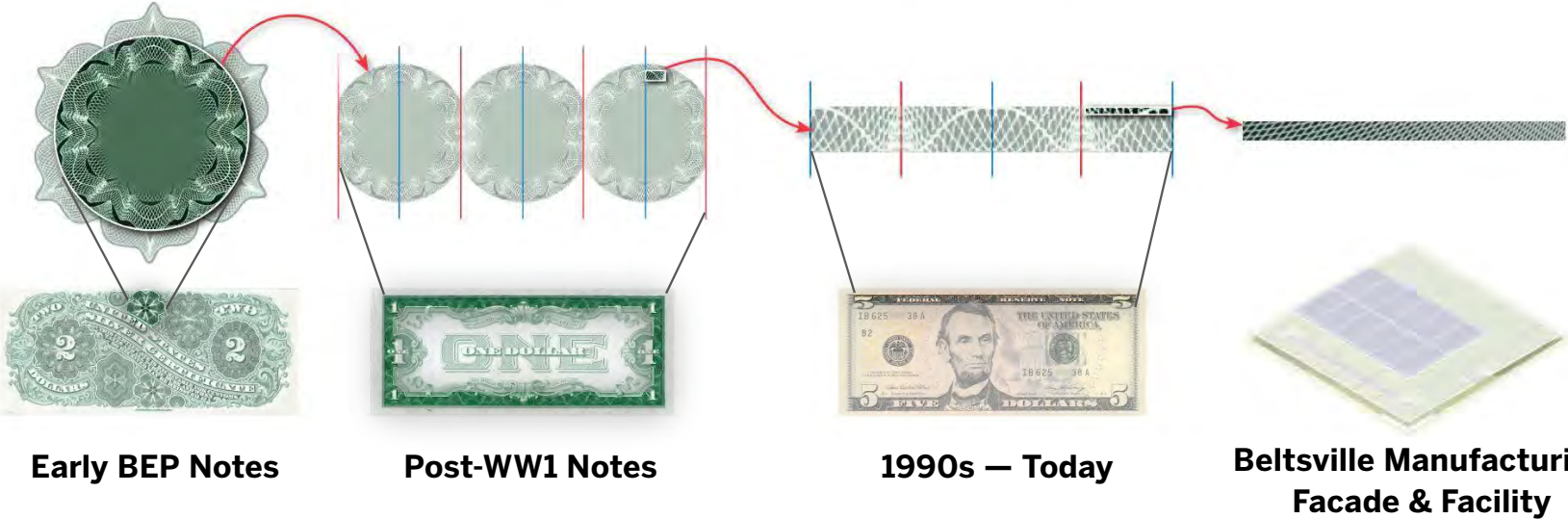
8 acre photovoltaic roof array providing 80% of annual energy needs
13 acre green roof for stormwater retention



Expressing BEP's visual legacy through the banknote

BEP's legacy became the backbone of a comprehensive program of visual elements that define the building both inside and out. For the building interior and facade design, the team drew inspiration from the banknote itself, including banknote serial numbering and their "guilloches"—the complex, web-like line patterns—both seen on every modern and historic banknote. The team

analyzed historic examples and observed changes over time to develop a custom guilloche that loops and weaves across a perforated and opaque metal rainscreen on all four sides of the building. The result is a protective shroud that is performative—mitigating glare and heat gain while providing daylight and views to the surrounding landscape—and symbolic.



Humanizing an industrial space

The BEP's production process needs large floor plates to operate at full speed, and the new building will finally provide that expansive space. The facility is designed with an open manufacturing hall at its center and the bureau's diverse range of programs—including offices,

storage, and laboratories—at its perimeter. A 900-foot-long, interior thoroughfare, called "Main Street" (below), draws inspiration from the BEP's existing underground passageway in Washington, D.C.—reimagining that passage as an amenity for meetings and the spontaneous exchange of ideas.





Harmonizing industry with the environment

In tracking the whole life carbon of the project, the team has developed a design that will use low-carbon materials and energy-efficient building systems. When the building is complete, it will decrease the BEP's operational carbon emissions by 45 percent, all while increasing its banknote production capacity.

BEP will operate 24 hours per day, the materials were selected for their durability, including low embodied concrete, recycled steel, and mass timber. The team designed a custom series of cross-laminated timber stairs, as well as partitions and modular wood furniture and storage shelves throughout the building—enhancing sustainability and wellbeing simultaneously. Natural daylighting will reduce energy use further, contributing to a targeted LEED Gold certification.

Various strategies makes this possible, from the project's economical approach to material use to its on-site generation of green energy. Because

